

INTERNATIONAL SPACE STATION AND PAYLOAD PROCESSING

INTERNATIONAL SPACE STATION ASSET TRACKING PLAN



National Aeronautics and
Space Administration
John F. Kennedy Space Center

**KSC
ISS ASSET TRACKING PLAN**

SIGNATURE PAGE

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REVISION AND HISTORY CHANGE PAGE

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Basic	Change Request/Directive #CM-00-024	08/01/01

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ABBREVIATIONS AND ACRONYMS

ADP	Acceptance Data Package
AMS	Asset Management System
DD	Defense Department
FAR	Federal Acquisition Regulations
GFP	Government Furnished Property
GOLD	Government On-Line Data
IAW	In Accordance With
ID	Identification
IP	International Partner
ISS	International Space Station
JSC	Johnson Space Center
KSC	Kennedy Space Center
MEIT	Multi-Element Integration Test
MSFC	Marshall Space Flight Center
NASA	National Aeronautics and Space Administration
NPD	NASA Policy Directive
OEM	Original Equipment Manufacture
OPR	Office of Prime Responsibility
P/L	Payload
PGOC	Payload Ground Operations Contract
POC	Point Of Contact
PRACA	Problem Report And Corrective Action
RI	Receiving Inspection
T&R	Test & Return
SPP	Standard Practices & Procedures
U.S.	United States

KSC ISS ASSET TRACKING PLAN

PREFACE

This plan describes the requirement to track and control assets that are delivered to Kennedy Space Center (KSC) in support of the International Space Station (ISS) processing and operations. The assets arriving from various sources are shipped to the Payloads Ground Operations Contractor (PGOC) as non-deliverable to the NAS10-11400 (Boeing-PGOC) and the NAS15-10000 (Boeing-Prime) contracts and therefore must be managed and controlled within established procedures, regulations and guidelines. The contractor, PGOC is tasked to utilize a process that will effectively and efficiently track and control the ISS assets, insuring the availability of the asset when needed to support the processing of ISS elements for flight.

SECTION 1.0

INTRODUCTION

1.0 INTRODUCTION

1.1 PURPOSE / OBJECTIVE

This plan defines the concept and the guidance to carry out the task of tracking, controlling and managing International Space Station assets while at KSC. Throughout the plan the term assets shall mean equipment and material delivered to PGOC in support of ISS processing and operations. Once the assets have been shipped to and received by PGOC they will assume the responsibility but not accountability of these assets. This means that the assets will be managed, tracked and controlled while assigned to PGOC.

1.2 AUTHORITY / PLAN OPR

Specific authority to carry out the PGOC tasking is contained within this plan, and is the basis and authority for all upcoming planning and implementation activities relating to the tracking and management of assets as described within this plan. Any recommended changes, additions or deletions to this plan may be directed to the Plan OPR, NASA-KSC ISS & Payloads Directorate's Logistics Office (UB-D) who has overall technical and administrative responsibility.

1.3 SCOPE / APPLICABILITY

This plan provides the description of operational and administrative tasks to track and control assets as defined in this plan (See Enclosure 1-1, Qualification Of An Asset). The plan is developed to provide NASA, domestic and international contractors, sub-contractors, suppliers, experiment, and payload users, international and program participants with an understanding of the PGOC system to manage, track, and control flight and non-flight ISS assets.

1.4 REFERENCE DOCUMENTATION

The following documents were used or referenced in the development of this plan.

<u>REF.</u>	<u>SOURCE</u>	<u>TITLE</u>
A	NASA	K-SS-12.17/ISS and Payloads Receiving and Shipping Guideline
B	NASA	KCS-PL-0012.1.2/Spacelab Logistics Phasedown / Termination and Closeout (Archived)
C	NASA	Federal Acquisition Regulations with NASA Supplement
D	Boeing	ISS/GFP IP Tracking and Handling Process, Dtd. 12/13/00
E	NASA	NPD 7500.1/Program and Project Logistics Policy Directive
F	NASA	K-SS-12.10 / Logistics Capabilities Manual
G.	NASA	NAS10-11400, Mod 762, Para. 6.6.1, Dtd. 4/19/01

ENCLOSURE 1-1

QUALIFICATION OF AN ASSET

The following qualification criteria applies to the term "ISS assets" as used within this document

1. The asset is delivered to KSC in support of ISS processing and operations
2. The asset is comprised of flight and non-flight material and equipment
3. The asset is shipped to KSC as non-deliverable to the NAS10-11400 PGOC or to the NAS15-10000 Boeing Prime contracts
4. The asset is to be controlled and tracked within the appropriate KSC inventory management systems

SECTION 2.0

CONCEPT, GROUND RULES AND ASSUMPTIONS

2.0 CONCEPT, GROUND RULES AND ASSUMPTIONS

2.1 CONCEPT

The concept of this plan is to provide instructions, guidance and information necessary to establish, implement and carryout a tracking system for the effective control and management of ISS assets shipped to PGOC for the support of ISS pre-launch and post-landing operations.

2.2 GROUND RULES

- 2.2.1 The physical receipt and processing of the assets through Receiving Inspection (RI) as well as the preparation and actual shipment to another location is addressed and controlled.
- 2.2.2 The document normally used to control the inbound and outbound shipment of assets will be the Form DD1149, "Requisition & Invoice / Shipping Document" or its equivalent.
- 2.2.3 PGOC assumes the responsibility, but not the accountability of the assets for as long as the assets are controlled by PGOC.
- 2.2.4 Figure 2-1, "ISS ASSETS ARRIVING AT KSC-PGOC" depicts the disposition of ISS assets as they arrive at KSC-PGOC. The ISS assets, as described within this plan will be received, managed, tracked and controlled under this plan and the NASA/PGOC Standard Practices & Procedures (SPP), L-07, Asset Tracking Document.
- 2.2.5 The appropriate PGOC inventory management systems will be used for the tracking and management of the assets while controlled by the PGOC.
- 2.2.6 PGOC is required to track, control, and otherwise manage the assets for as long as the assets are located at KSC.

2.2 GROUND RULES (Cont'd)

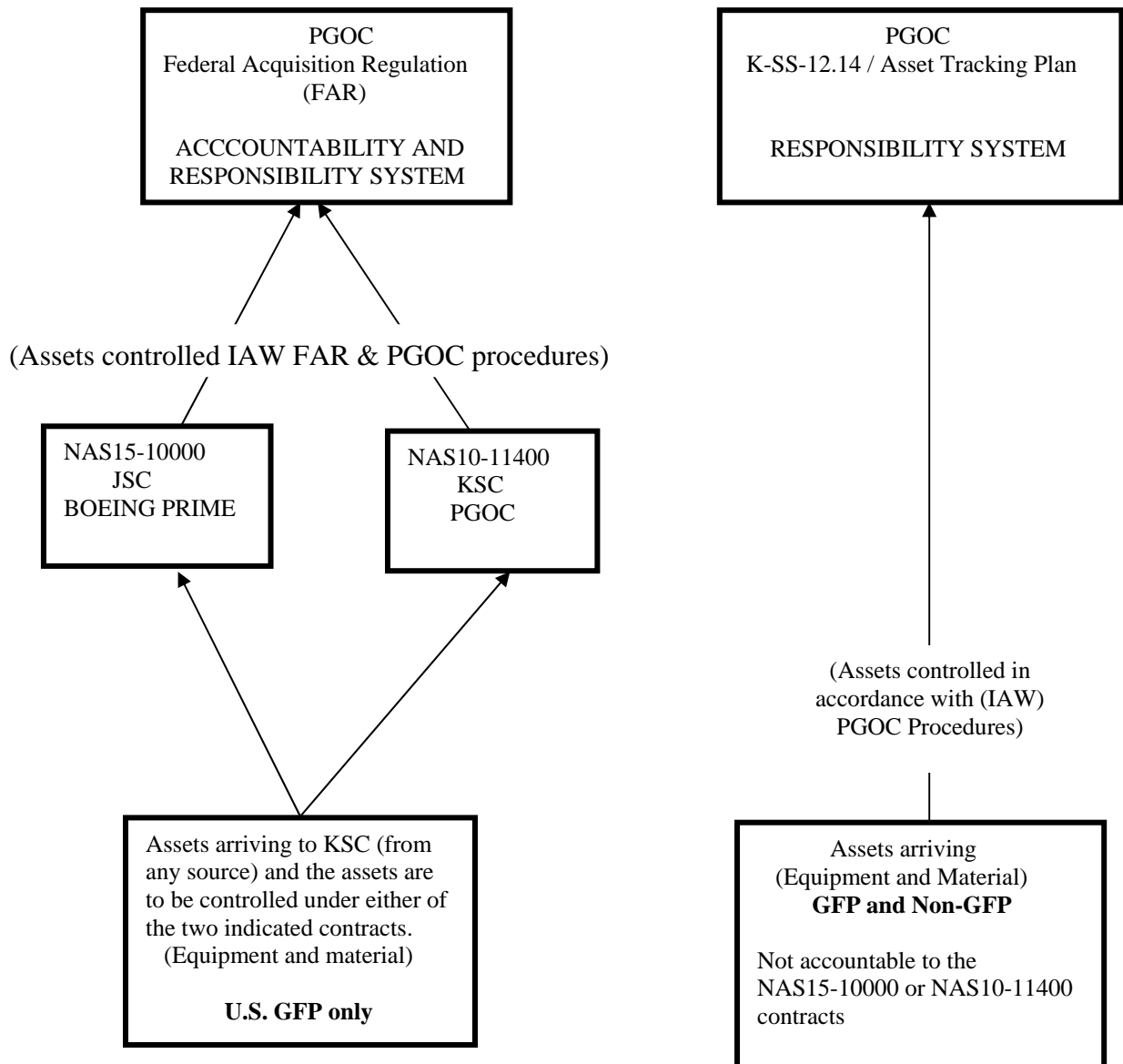
- 2.2.7 Material, i.e. consumables, marked as flight or non-flight use will not have property tags affixed to them. Additionally, assets that are delivered and utilized by the Off-Line Utilization group will not be tagged nor will they be tracked and controlled under this plan (See Paragraph 2.2.10, this plan).
- 2.2.8 Non-flight Equipment should have a property tag affixed reflecting as a minimum ownership and a tracking number. If no tag is affixed to the asset then PGOC will take steps to attach a property tag to the asset for tracking and identification purposes.
- 2.2.9 The property tag will remain on the assets for as long as the assets remain in the control of PGOC.
- 2.2.10 Non-flight and flight equipment that is shipped to KSC and is identified and scheduled to be delivered to the Utilization Off-Line function will be processed through the Receiving Inspection (RI) function for a count & condition and damage only, then turned over to the Utilization Off-Line function. When the equipment is released from the Utilization Off-Line function the Off-Line labs will generate the appropriate documentation to turn the asset over to the On-Line function through the Receiving Inspection activity as depicted in Figure 3-1 and the NASA/PGOC SPP L-07 Asset Tracking document will provide further details.

2.3 ASSUMPTIONS

- 2.3.1 The "International Space Station and Payloads Receiving and Shipping Guideline" document, K-SS-12.17, will be used by the providers, i.e. the International Partner's (IP's), the Participating Partners (PP's), Academia, etc. to ship the assets to KSC.

FIGURE 2-1

ISS ASSETS ARRIVING AT KSC - PGO



SECTION 3.0

IMPLEMENTATION

3.0 IMPLEMENTATION

3.1 TECHNICAL APPROACH

Once the assets arrive at the PGOC Central Receiving and pass through the receiving and inspection process, PGOC assumes responsibility for the assets. The approach to controlling and tracking the assets as defined in this plan should closely follow the "ISS ASSET Tracking Process Flow" schematic shown in Figure 3-1, this Section and further defined in the NASA/PGOC SPP L07 Asset Tracking document. The process flow addresses the receipt of assets and assignment of the assets to a specific inventory management system. The chart also addresses the tracking, control, and maintenance of these assets while assigned to PGOC, to include annual inventories until consumed during ISS processing or shipment of the assets off-Center. Institutional services and facilities are available to support the customer assets as they arrive at KSC, these include, but are not limited to the services depicted in Enclosure 3-1.

3.2 REQUIREMENTS AND RESPONSIBILITIES:

Subsequent to KSC PGOC receiving the asset, the tracking process assumes responsibility for the assets and tracks, controls and manages the asset while it is located at KSC. The control process will utilize established inventory management systems. The assets consist of flight and non-flight equipment, as well as material and will come under the control and tracking responsibility of this plan and the SPP L07, "Asset Tracking" document. The requirement to control and track the assets along with the associated organizational responsibilities are briefly discussed within the following paragraphs and in greater detail in the Standard Practices & Procedures document.

The task to conduct and report annual physical inventories is identified in the PGOC NAS10-11400 contract Statement of Work (SOW). The physical inventories are to be performed on the inventory management systems used in support of this plan. Additional guidance and direction is provided in the SPP L07, "Asset Tracking" document.

3.3 ORGANIZATIONAL RESPONSIBILITIES

3.3.1 PGOC LOGISTICS FUNCTIONS WILL:

- 3.3.1.1 Perform Receiving of all hardware/ software
- 3.3.1.2 Maintain Receiving Shipping / Receiving records
- 3.3.1.3 Support IP, PP, NASA, etc. telecons and meetings
- 3.3.1.4 Coordinate packing and return to gaining organization
- 3.3.1.5 Arrange and support asset movement on-Center
- 3.3.1.6 Support inbound and outbound shipment telecons
- 3.3.1.7 Ensure appropriate assets have property ID tags
- 3.3.1.8 Provide Hardware Disposition List information
- 3.3.1.9 Provide contacts to coordinate any tracking issues and concerns
- 3.3.1.10 Conduct annual physical inventory, report results to appropriate organizations, and resolve any discrepancies
- 3.3.1.11 Maintain the appropriate inventory systems to manage, track and control the assets
- 3.3.1.12 Support MEIT meetings, address issues and concern
- 3.3.1.13 Support ISS asset status meetings

3.3.2 PGOC S&MA FUNCTIONS WILL

- 3.3.2.1 Perform Quality Shipping/Receiving Inspection of all hardware/software. Maintain Quality Shipping/ Receiving records
- 3.3.2.2 Control ADPs in a secure location. Process ADP's to meet ISS program requirements. Update asset ADP's as appropriate from NASA-KSC provided data
- 3.3.2.3 Document, validate and coordinate non-conformance dispositions with the responsible engineering group which are identified while under PGOC property custody
- 3.3.2.4 Provide Material Review Center support for control of non-conforming hardware pending disposition
- 3.3.2.5 Coordinate all non-conformance with NASA-KSC
- 3.3.2.6 Perform limited life item tracking for ADP updates
- 3.3.2.7 Provide reports on failed hardware or open PRACA as required

3.3 KSC TECHNICAL POINTS OF CONTACT (POC)

Contact the appropriate listed agency or office for information relative to the tracking and management of the assets identified within this plan.

NASA KSC Mission Support Representative

Telephone: 321.867.6074

Fax: 321.867.6110

PGOC Mission Support Representative

Telephone: 321.867.5681

Fax: 321.867.6580

PGOC Property Management Representative

Telephone: 321.867.2206

Fax: 321.867.7609

PGOC Material Management Representative

Telephone: 321.867.3113

Fax: 321.867.7609

PGOC Transportation / Receiving Representative

Telephone: 321.867.3010

Fax: 321.867.1837

PGOC Warehouse and Storage Representative

Telephone: 321.867.1019

Fax: 321.867.4213

PGOC Safety & Mission Assurance

Telephone: 321.867.1615

Fax: 321.867.3742

PGOC Mission Support Representative

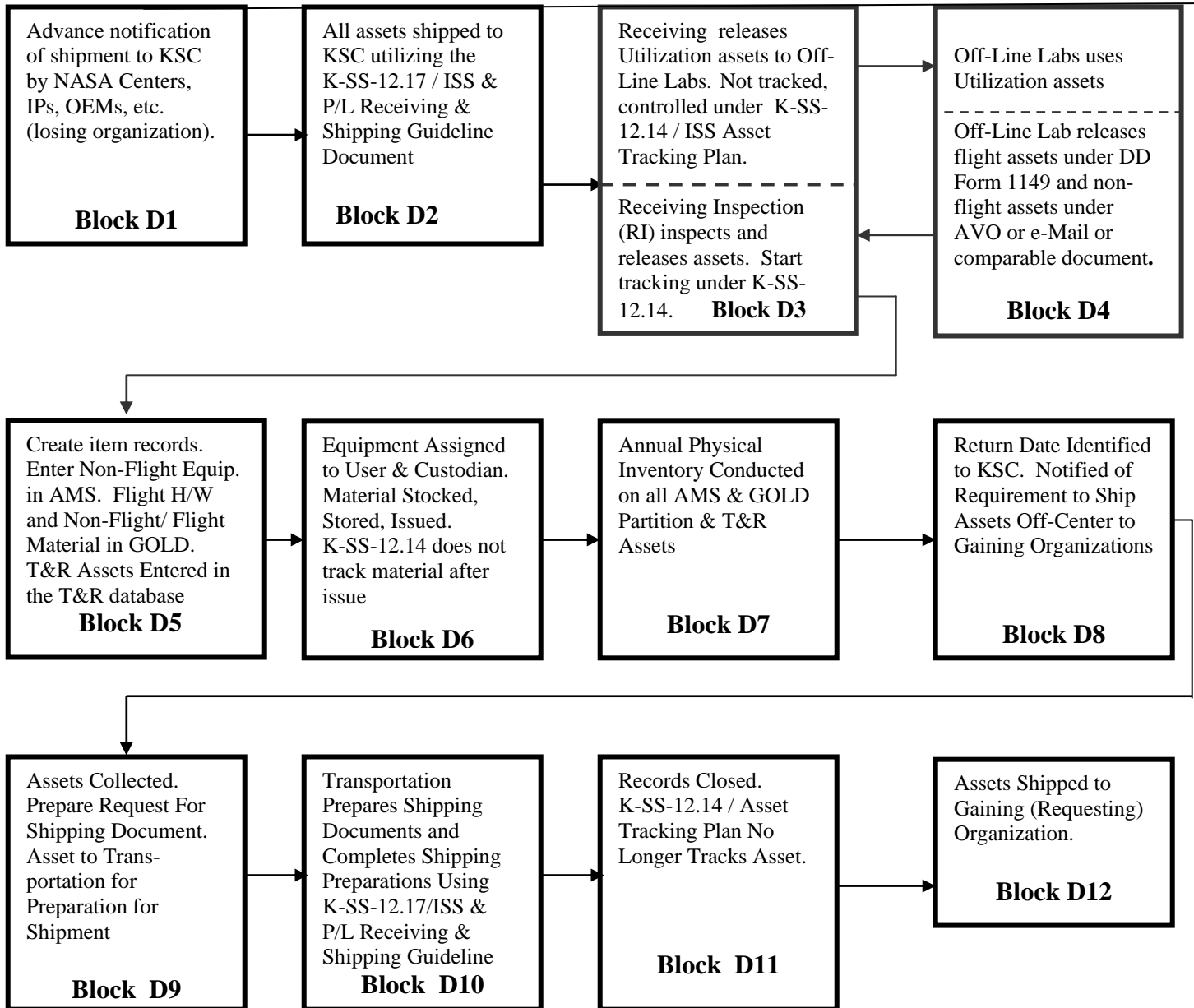
Telephone: 321.867.5746

Fax: 321.867.6535

Figure 3-1

PGOC ISS ASSET TRACKING PROCESS FLOW

SITUATION: Other NASA Centers, OEMs, IPs, etc. (losing organization) provide hardware assets, including Utilization Off-Line Lab assets, to KSC



ENCLOSURE 3-1

INSTITUTIONAL SERVICES AND SUPPORT

The following logistics tasks are covered in the PGOC “Host Role” services and are provided to the “asset users” as defined in this plan at KSC to include:

- Receiving & Receiving Inspection
- Transportation
- Packing and Crating
- Materials & Process
- Technical Training
- Bench Stock
- Garment Issue
- Common Tool Loan
- Headsets
- Mail/Reproduction
- Office Space
- Procurement

Reference NASA document K-SS-12.10, Logistics Capability Manual, for a more detailed description of available institutional services and support.

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UB-D / Heimmer, H
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PGOC / Boeing-KSC

721S-S320 (P440) / Kurrus, R.
721S-S315 (P446) / Anderson, B.
721S-S330 (P464) / Roper, R.
721M-5115 (P458) / Spicer, B.
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721O-C415 (P448) / Traylor, T.
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